Appendix to General Requirements

VA PROJECT NO.: 583-330

Infection Control Risk Assessment Matrix of Precautions for Construction & Renovation

Step One:

Using the following table, *identify* the Type of Construction Project Activity (Type A-D)

	Inspection and Non Investive Activities
	Inspection and Non-Invasive Activities.
	Includes, but is not limited to:
	• removal of ceiling tiles for visual inspection limited to 1 tile per 50 square feet
TYPE A	painting (but not sanding)
	 wall covering, electrical trim work, minor plumbing, and activities which do not generate dust or require cutting of walls or access to ceilings other than for visual inspection.
	Small scale, short duration activities which create minimal dust
	Includes, but is not limited to:
TYPE B	 installation of telephone and computer cabling
	access to chase spaces
	 cutting of walls or ceiling where dust migration can be controlled.
	Work that generates a moderate to high level of dust or requires demolition or
	removal of any fixed building components or assemblies
	Includes, but is not limited to:
	 sanding of walls for painting or wall covering
TYPE C	 removal of floorcoverings, ceiling tiles and casework
	• new wall construction
	 minor duct work or electrical work above ceilings
	 major cabling activities
	any activity which cannot be completed within a single workshift.
	Major demolition and construction projects
	Includes, but is not limited to:
TYPE D	 activities which require consecutive work shifts
	 requires heavy demolition or removal of a complete cabling system
	new construction.

STEP 1:	

Step Two:

Using the following table, *identify* the <u>Patient Risk</u> Groups that will be affected. If more than one risk group will be affected, select the higher risk group:

Low Risk	Medium Risk	High Risk	Highest Risk
• Office areas	 Cardiology Echocardiography Endoscopy Nuclear Medicine Physical Therapy Radiology/MRI Respiratory Therapy 	 CCU Emergency Room Labor & Delivery Laboratories (specimen) Newborn Nursery Outpatient Surgery Pediatrics Pharmacy Post Anesthesia Care Unit Surgical Units 	 Any area caring for immunocompromised patients Burn Unit Cardiac Cath Lab Central Sterile Supply Intensive Care Units Medical Unit Negative pressure isolation rooms Oncology Operating rooms including C-section rooms

Step 2

Step Three: Match the

Patient Risk Group (Low, Medium, High, Highest) with the planned ... Construction Project Type (A, B, C, D) on the following matrix, to find the ... Class of Precautions (I, II, III or IV) or level of infection control activities required.

Class I-IV or Color-Coded Precautions are delineated on the following page.

IC Matrix - Class of Precautions: Construction Project by Patient Risk

Construction Project Type

Patient Risk Group	TYPE A	TYPE B	TYPE C	TYPE D
LOW Risk Group	I	П	П	III/IV
MEDIUM Risk Group	I	II	Ш	IV
HIGH Risk Group	I	П	III/IV	IV
HIGHEST Risk Group	II	III/IV	III/IV	IV

Note: Infection Control approval will be required when the Construction Activity and Risk Level indicate that **Class III** or **Class IV** control procedures are necessary.

C		
Step 3		
Sich 3		

Description of Required Infection Control Precautions by <u>Class</u>
During Construction Project Upon Completion of Project

Du	3 111 6	Construction Project	Opon Completion of Project
CLASS	1. 2.	Execute work by methods to minimize raising dust from construction operations. Immediately replace a ceiling tile displaced for visual inspection	
CLASS II	1. 2. 3. 4. 5. 6.	Provide active means to prevent airborne dust from dispersing into atmosphere. Water mist work surfaces to control dust while cutting. Seal unused doors with duct tape. Block off and seal air vents. Place dust mat at entrance and exit of work area Remove or isolate HVAC system in areas where work is being performed.	 Wipe work surfaces with disinfectant. Contain construction waste before transport in tightly covered containers. Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area. Remove isolation of HVAC system in areas where work is being performed.
CLASS III	 2. 3. 5. 	Remove or Isolate HVAC system in area where work is being done to prevent contamination of duct system. Complete all critical barriers i.e. sheetrock, plywood, plastic, to seal area from non work area or implement control cube method (cart with plastic covering and sealed connection to work site with HEPA vacuum for vacuuming prior to exit) before construction begins. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units if indicated. Contain construction waste before transport in tightly covered containers. Cover transport receptacles or carts. Tape covering unless solid lid.	 Do not remove barriers from work area until completed project is inspected by the owner's Safety Department and Infection Control Department and thoroughly cleaned by the owner's Environmental Services Department. Remove barrier materials carefully to minimize spreading of dirt and debris associated with construction. Vacuum work area with HEPA filtered vacuums. Wet mop area with disinfectant. Remove isolation of HVAC system in areas where work is being performed.

- 1. Isolate HVAC system in area where work is being done to prevent contamination of duct system.
- 2. Complete all critical barriers i.e. sheetrock, plywood, plastic, to seal area from non work area or implement control cube method (cart with plastic covering and sealed connection to work site with HEPA vacuum for vacuuming prior to exit) before construction begins.
- 3. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units if indicated.
- 4. Seal holes, pipes, conduits, and punctures appropriately.
- 5. Construct anteroom and require all personnel to pass through this room so they can be vacuumed using a HEPA vacuum cleaner before leaving work site or they can wear cloth or paper coveralls that are removed each time they leave the work site.
- 6. All personnel entering work site are required to wear shoe covers. Shoe covers must be changed each time the worker exits the work area.
- 7. Do not remove barriers from work area until completed project is inspected by the owner's Safety Department and Infection Control Department and thoroughly cleaned by the owner's Environmental Services Department.

- Remove barrier material carefully to minimize spreading of dirt and debris associated with construction.
- 2. Contain construction waste before transport in tightly covered containers.
- 3. Cover transport receptacles or carts. Tape covering unless solid lid
- 4. Vacuum work area with HEPA filtered vacuums.
- 5. Wet mop area with disinfectant.
- 6. Remove isolation of HVAC system in areas where work is being performed.

Step 4. Identify the areas surrounding the project area, assessing potential impact

Unit Below	Unit Above	Lateral	Lateral	Behind	Front
Risk Group					

Step 5. Identify specific site of activity eg, patient rooms, medication room, etc.

Step 6. Identify issues related to: ventilation, plumbing, electrical in terms of the occurrence of probable outages.

Step 7. Identify containment measures, using prior assessment. What types of barriers? (Eg, solids wall barriers); Will HEPA filtration be required?

(Note: Renovation/construction area shall be isolated from the occupied areas during construction and shall be negative with respect to surrounding areas)

- Step 8. Consider potential risk of water damage. Is there a risk due to compromising structural integrity? (eg, wall, ceiling, roof)
- Step 9. Work hours: Can or will the work be done during non-patient care hours?
- Sep 10. Do plans allow for adequate number of isolation/negative airflow rooms?
- Step 11. Do the plans allow for the required number & type of handwashing sinks?
- Step 12. Does the infection control staff agree with the minimum number of sinks for this project? (Verify against AIA Guidelines for types and area)
- Step 13. Does the infection control staff agree with the plans relative to clean and soiled utility rooms?
- Step 14. Plan to discuss the following containment, noise or vibration issues with the project team.

Eg, traffic flow, housekeeping, debris removal (how and when)

Appendix: Identify and communicate the responsibility for project monitoring that includes infection control concerns and risks. The ICRA may be modified throughout the project.

Revisions must be communicated to the Project Manager.

	Infection Control Construction	n Per	mit					
				Permit No:				
Location	of Construction:		Proj	ect Start Date:				
Project Co	oordinator:		Esti	mated Duration:				
	or Performing Work		Pern	nit Expiration Date:				
Superviso	or:		Tele	ephone:				
YES NO	CONSTRUCTION ACTIVITY	YES	NO	INFECTION CONTROL RISK GROUP				
	TYPE A: Inspection, non-invasive activity			GROUP 1: Low Risk				
	TYPE B: Small scale, short duration, moderate to high levels			GROUP 2: Medium Risk				
	TYPE C: Activity generates moderate to high levels of dust, requires greater 1 work shift for completion			GROUP 3: Medium/High Risk				
	TYPE D: Major duration and construction activities Requiring consecutive work shifts			GROUP 4: Highest Risk				
CLASS I	 Execute work by methods to minimize raising dust from construction operations. Immediately replace any ceiling tile displaced for visual inspection. 	3.	Minor De	emolition for Remodeling				
CLASS II	Provides active means to prevent air-borne dust from dispersing into atmosphere			construction waste before transport in tightly containers.				
	2. Water mist work surfaces to control dust while cutting. 3. Seal unused doors with duct tape. 4. Block off and seal air vents. 5. Wipe surfaces with disinfectant.	7. I 8. I 9. I	 Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area. Place dust mat at entrance and exit of work area. 					
CLASS III	ASS III 1. Obtain infection control permit before construction begin 2. Isolate HVAC system in area where work is being done to prevent contamination of the duct system. 3. Complete all critical barriers or implement control cube method before construction begins.			work with HEPA filtered vacuums. by with disinfectant barrier materials carefully to minimize g of dirt and debris associated with tion.				
Date	4. Maintain negative air pressure within work site utilizing			construction waste before transport in overed containers.				
Initial	 HEPA equipped air filtration units. 5. Do not remove barriers from work area until complete project is thoroughly cleaned by Env. Services Dept. 	11.	Remove o	ansport receptacles or carts. Tape covering. or isolate HVAC system in areas where work performed/				
Class IV	 Obtain infection control permit before construction begins. Isolate HVAC system in area where work is being done to prevent contamination of duct system. Complete all critical barriers or implement control cube 	8. I	shoe cove Do not re project is	emove barriers from work area until complete s thoroughly cleaned by the Environmental				
Date	method before construction begins. 4. Maintain negative air pressure within work site utilizing	9.		work area with HEPA filtered vacuums.				
Initial	HEPA equipped air filtration units. 5. Seal holes, pipes, conduits, and punctures appropriately. 6. Construct anteroom and require all personnel to pass through this room so they can be vacuumed using a HEPA vacuum cleaner before leaving work site or they can wear cloth or paper coveralls that are removed each time they leave the work site.	11. 1 12. (13. (14. 1	Remove I spreading construct Contain of covered of Cover tra	construction waste before transport in tightly containers. ansport receptacles or carts. Tape covering. or isolate HVAC system in areas where is				
Additional Rec	quirements:							
Date Initials		Initial	s are i	Exceptions/Additions to this permit Date noted by attached memoranda				
Permit Reques	et By:	Permi	t Authori	rized By:				
Date:	-	Date:						

ILSM PERMIT

Effective on:	
Interim Life Safety Measures are in effect following areas:	t for the
Reason:	
Requirements:	
Alternate route of egress is (attach map)	
Signature & Title of Project Engineer/COR *Project Engineer/COR will post this completed document at the job site.	Date
Signature of Safety Manager	Date
Signature of Resident Engineering LSC Expert	 Date

Definitions:

Compartmentalization – the concept of using various building components (for example, fire-rated walls and doors, smoke barriers, fire-rated floor slabs) to prevent the spread of fire and the products of combustion so as to provide a safe means of egress to an approved exit. The presence of these features varies, depending on the building occupancy classification.

Fire Watch – The assignment of a person or persons to an area for the express purpose of notifying the fire department, the building occupants, or both of an emergency; preventing a fire from occurring; extinguishing small fires; or protecting the public from fire or life safety dangers.

Project:				Signature:						Date:							
Life Safety Deficiency Existing Significant Life Safety Code Deficiencies or Conditions as a Result of Construction The following measures will be implemented when monitoring systems are impaired >4 hours								ILSM A	Admir	nistrat	ive Ac	tion R	Require	ed			
Code Deficiencies	Yes	No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Lacking code required smoke barrier or fire wall						Х			Х	Х		Х	Х	Х		Х	
Minor penetrations in smoke barrier or fire wall						X			Х			Х	X	Х		X	
Major penetrations in smoke barrier or fire wall						Х			Х	Х		Х	Х	Х		Х	
Hazardous area not properly protected						Х			Х	Х			Х		Х	Х	
5. Excessive travel distance to an approved exit									Х	Х		Х		Х		Х	
6. Lack of a required exit				Х					Х	Х		Х				Х	
7. Improper or defective smoke barrier or fire wall door					Х			Х			Х	Х				Х	
Construction Related Deficiencies	Yes	No															
Blocking an approved exit path				Х	Х			Х	Х							Х	
A large section of the fire alarm system is out of service			Х				Х	Х	Х	Х						Х	
3. A large section of a sprinkler system is out of service			Х				Х	Х	Х	Х						Х	
Major renovation of an occupied floor					Х		Х	Х	Х	Х						Х	
5. Significantly modifying smoke barriers or fire walls							Х	Х	Х	Х						Х	
Adding an addition to an existing and occupied building				Х	Х			Х	Х			Х				Х	
7. Rerouting internal patient/staff/visitor traffic flows				Х	Х			Х	Х							X	
Rerouting exterior access to the hospital			Х	Х				Х				Х	Х		Х	Х	
Maintenance or Repairs	Yes	No															
Fire alarm system out of service > 4 hours			Х			Х			Х	Х		Х	Х		Х	Х	
2. Sprinkler system out of service > 4 hours			Х			Х			Х	Х	Х	Х	Х		Х	Х	
3. One fire alarm zone out of service > 4 hours			Х						Х	Х						Х	
4. A few sprinkler zones out of service > 4 hours			Х						Х	Х						Х	
5. Other system (halon, kitchen hood, etc.) out of service							Х		Х	Х	Х					Х	
All Other (See John Piwowarski)																	

RLR VAMC GARAGE EXPANSION PROJECT # 583-330

OCTOBER 14, 2014

Risk Score Yes / No / NA=Not applicable									

Measure	Requirement
1.	If Alarms/Sprinklers are out of service 4 or more hrs in 24 hrs period – A Fire watch is implemented and the Fire Department is contacted. Notification and Fire Watch times are documented.
2.	Signs for alternate exits posted
3.	Inspect exits in affected areas on a daily basis.
4.	Provide Temporary but equivalent fire alarm and detection systems for use when the fire system is impaired.
5.	Additional type ABC fire extinguishers provided
6.	Uses temporary construction partitions which are Smoke tight, non-combustible, or limited-combustible material that shall not contribute to the development or spread of fire.
7.	Increase surveillance implemented for buildings, grounds and equipment with special attention to construction areas, storage excavation and field offices.
8.	Enforce Storage and debris removal practices
9.	Additional training for personnel on firefighting equipment
10.	Additional observation, critique, and education will be performed for fire drills performed (one per shift per quarter) in affected areas
11.	Inspect and test temporary systems monthly. Ensure the completion date is documented
12.	Conduct organization wide safety education programs to promote awareness of fire safety building deficiencies, construction hazards, and temporary ILSM measures implemented.
13.	Train personnel to compensate for impaired structural or compartmentalization features of fire safety.
14.	The hospital has a written ILSM Policy identifying when and to what extent ILSM implemented
15.	

Veterans Health Administration Washington, DC 20420

September 22, 2011

SAFETY AND HEALTH DURING CONSTRUCTION

1. PURPOSE: This Veterans Health Administration (VHA) Directive establishes policy for maintaining a safe and healthy worksite for staff, volunteers, visitors, contractors, and the general public during construction and renovation-related activities. This policy applies to all construction activities as defined by Occupational Safety and Health Administration (OSHA) that are performed at VHA owned or leased facilities regardless of whether performed by VHA or contractor staff.

2. BACKGROUND

- a. OSHA Title 29 Code of Federal Regulations (CFR) Part 1926, The Joint Commission (TJC) and National Fire Protection Association (NFPA) standards identify requirements for safe construction practices. Environmental Protection Agency (EPA) regulations address safety requirements related to specific environmental issues (e.g., asbestos, lead, etc.). The Federal Acquisition Regulation (FAR) and Veterans Affairs Acquisition Regulation (VAAR) address contractor safety and Department of Veterans Affairs (VA) oversight requirements.
- b. The implementation of a proactive and comprehensive construction safety program reduces the potential for injury and illness from unsafe and unhealthy construction activities. Construction safety programs reduce the potential for VHA liability that could result from construction-related accidents, injuries or exposures.

c. **Definitions**

- (1) **Competent Person (CP).** OSHA defines a CP as one who is capable of identifying existing and predictable hazards in the surroundings and working conditions which are unsanitary, hazardous or dangerous to employees, and who has the authorization to take prompt corrective measures to eliminate them (see 29 CFR 1926.32(f)).
- (2) **Construction.** OSHA defines construction as alteration or repair, including painting and decorating of a large scale or high-complexity. For further clarification of the definition of construction please refer to OSHA's letters of interpretation (see subpar. 5s).
- (3) **Construction Lead Person**. The construction lead person is typically the contractor's foreperson or superintendent, or the VHA foreperson or engineering supervisor. However, it could be any other individual assigned to lead and direct a work crew operation. This person acts as the OSHA CP responsible for monitoring the construction site for hazards and implementing corrective actions.
- (4) **Construction Safety Officer (CSO).** The CSO identifies worksite risk and coordinates risk reduction activities through the Contracting Officer (CO) or the Contracting Officers

THIS VHA DIRECTIVE EXPIRES SEPTEMBER 30, 2016

Technical Representative (COTR), collects deficiency information, and disseminates summaries of action and results (TJC standards, construction risks in physical environment). This individual satisfies the VAAR 852.236-87 (see subpar. 5p) requirement to have a Safety Officer to monitor and enforce Contractor compliance with FAR 52.236-13 (see subpar. 4r).

- (5) **High-Severity Serious-Construction (HSCS) Accidents.** HSCS accidents include fatalities and permanently disabling injuries or illnesses. This includes amputations, crushing with loss of use of body part, third to fifth degree burns or scalds, loss of sight, and respiratory illnesses. HSCS accidents include near misses that could result in fatalities or permanently disabling injuries or illnesses.
- (6) **Interim Life Safety Measures (ILSM).** ILSM is a series of eleven administrative actions to temporarily mitigate National Fire Protection Association 101 2000 Life Safety Code deficiencies or construction activities (TJC standards) (see Standards Sec. EC 5.5).
- (7) **Maintenance.** The term "maintenance" refers to applied trades work on a structure, fixture, foundation or other building systems to ensure a safe and functional condition.
- **3. POLICY:** It is VHA policy that construction and renovation activities on VHA-owned property and VHA-leased property be conducted in such a way as to protect the health and safety of VHA and contractor staff, patients, and the public.

4. ACTION

- a. <u>Under Secretary for Health.</u> The Under Secretary for Health ensures that a national policy covering construction safety at VHA facilities is issued.
- b. <u>Deputy Under Secretary for Health for Operations and Management.</u> The Deputy Under Secretary for Health for Operations and Management is responsible for issuing program guidance and policy related to construction safety at VHA facilities.
- c. <u>Director</u>, <u>Office of Construction and Facilities Management (00CFM)</u>. The Director, Office of Construction and Facilities Management (00CFM), is responsible for:
- (1) Developing construction guides, specifications and contract documents that specifically address safety requirements for construction projects. Specifications and project designs must reflect OSHA, NFPA, EPA, VA, and TJC requirements, and other recognized standards of safety that apply to the construction industry.
- (2) Providing design documents for construction projects to appropriate VA, Veterans Integrated Service Network (VISN) and VA medical center staff for review.
- (3) Ensuring Resident Engineers (RE) complete the OSHA 30-hour Construction Safety training course and a minimum 10 hours of construction safety refresher training every 2 years. The construction safety training must be documented in the RE's training record.

- (4) Ensuring REs comply with the established Resident Engineer Handbook (see subpar.5q), VAAR 852.236 (see subpar. 5p), and FAR 52.236.13.
- (5) Ensuring that on-site general and sub-contractor's construction workers have completed the OSHA 10 hour Construction Safety training, 30 hour Construction Safety course, and other relevant competency training.
- d. <u>Director</u>, <u>Safety</u>, <u>Health and Environmental Compliance</u>. The Director, Occupational Safety and Health, Environmental, and Emergency Management is responsible for:
- (1) Providing professional construction safety guidance in the recognition, evaluation, and control of construction hazards that comply with OSHA regulations, TJC accreditation requirements, and VA policy.
- (2) Developing and implementing construction safety goals and initiatives for the protection of staff, patients, visitors, contractors, and the public while on VHA-owned and VHA-leased properties.
- (3) Monitoring and evaluating VHA's construction safety program to ensure the reduction of construction work-related injuries and illnesses.
- (4) Evaluating HSCS construction accidents to determine causal factors, developing control measures, and identifying lessons learned.
- (5) Providing construction safety expertise to the Employee Education System (EES) in the development of Construction Safety training materials for VHA staff.
- e. <u>Director, VHA Office of Healthcare Engineering</u>. The Director, Office of Healthcare Engineering is responsible for:
- (1) Providing engineering support to VHA and VA Departments for the mitigation of construction hazards and risks.
 - (2) Communicating hazard alerts to health care engineers at VA-owned and VA-leased facilities.
- (3) Conducting, at VHA senior management's request, incident-related site investigations and report analysis.
- f. <u>Director, Infectious Disease Program.</u> The Director, Infectious Disease Program is responsible for:
- (1) Advising and providing recommendations on exposure mitigation and prevention of facility-associated infections for patients, staff, and visitors.
 - (2) Providing information and advice to VHA on infectious diseases associated with construction.

- (3) Advising or providing recommendations on protective practices to be employed during construction that reduce the risk of infection.
- g. <u>Director, Occupational Health, Strategic Health Care Group, Office of Public Health.</u>
 The Director, Occupational Health, Strategic Healthcare Group is responsible for providing consulting services to VHA, 00CFM, and the Office of Asset and Enterprise Management (OAEM) staff on occupational health issues related to construction activities.
- h. <u>Chief Officer, VHA Procurement and Logistics Office.</u> The Chief Officer, VHA Procurement and Logistics Office, is responsible for ensuring that contracts and related documents for construction and enhanced-use leased projects, include language that requires the work performed adheres to the requirements of this Directive.
- i. <u>Director, Office of Enterprise Operations and Field Development within The Office of Information and Technology (OI&T).</u> The Director, Office of Enterprise Operations and Field Development, OI&T, is responsible for ensuring that contracts and related documents for construction and enhanced-use leased projects include language that mandates adherence to the requirements of this Directive
- j. <u>Veterans Integrated Service Network (VISN) Director.</u> Each VISN Director is responsible for ensuring that:
 - (1) VHA policies for construction safety programs at VHA facilities are implemented.
- (2) The effectiveness of facility construction safety management program is monitored as a part of the Annual Workplace Evaluations (AWE) using the Safety Automated Facility Evaluation (SAFE) program.
- (3) All VISN Safety and Health Program Managers and staff that have responsibilities related to construction complete a 30-hour OSHA Construction Safety training and, as a refresher, subsequently complete at least 10 hours of construction safety-related training every 2 years. The construction safety training must be documented in their training record.
 - k. **VHA Facility Director.** The VHA Facility Director is responsible for:
- (1) Establishing and monitoring an effective facility construction safety program using a construction safety committee chaired by a member of management, or designee, composed of a Multi-disciplinary Team with representatives from the following program areas: Infection Control, Patient Safety, Occupational Safety and Health, VA Police, Engineering (Facilities Management), Engineering (Project Management), Green Environmental Management System (GEMS), Emergency Planning, Local Union Representatives, Employee Occupational Health, CSO, and Contracting.
 - (2) Ensuring that the Multi-disciplinary Team oversees:
- (a) Protection of patients, visitors, and employees from injury and illness, as well as occupational and nosocomial infections related to construction activities.

- (b) Compliance with Federal and state EPA and OSHA regulations.
- (c) Compliance with FAR and VAAR in addressing a contractor's construction safety program.
- (3) Developing and implementing a written policy addressing the responsibilities of the Multidisciplinary Team and establishment of a Construction Safety Committee or subcommittee.
- (4) Ensuring that the following VA staff complete OSHA's 30-hour Construction Safety training and, as a refresher, subsequently complete at least 10 hours of construction safety related training every 2 years:
 - (a) VHA Chief Engineers, COTR's Project Engineers, and Project Lead Persons;
 - (b) All members of the Multi-disciplinary Team; and
 - (c) CSO's and Facility Safety Program Managers.
 - 1. <u>Multi-disciplinary Team</u>. The Multi-disciplinary Team is responsible for:
- (1) Determining the scope and depth of safety, infection control, emergency management, and security responsibilities as appropriate for all construction work.
- (2) Confirming compliance with applicable regulations, standards, and policies during the construction phase of the work.
- (3) Conducting a pre-construction risk assessment to assess all hazards that affect health care, treatment, and services.
- (a) Staff must conduct and document in writing pre-construction risk assessments during the design or planning stage of the construction project and or renovation. Pre-construction risk assessments need to be conducted prior to bidding, award, and starting work.
- (b) Pre-construction risk assessments must focus on eliminating, or minimizing, the aforementioned risks during construction and renovation activities.
- (4) Conducting a pre-construction risk assessment for the transmission of Tuberculosis (TB) to the contracted construction workers based upon the construction site location, patient population, hospital layout, and the defined risk as outlined in the "CDC Guidelines for preventing the transmission of Mycobacterium Tuberculosis in Health-Care Setting, 2005" (see subpar. 5v).
- (5) Ensuring ILSMs are assessed and implemented on all construction work according to TJC standards. ILSMs are required when Life Safety Code deficiencies or construction activities pose significant hazards as determined by the assessment.

- (6) Participating in all phases of construction work from planning through completion. This includes review and approval of construction plans, contract specifications, contract submittals related to construction safety and health, and any other documents that may assist in the implementation of an effective construction safety program. The Multi-disciplinary Team must be involved early in the process and continue oversight on a regular basis.
- (7) Ensuring the Construction Safety Program includes periodic construction site hazard surveillance activities with appropriate membership, scope, and frequency for each project as determined by the CSO and the pre-construction risk assessment. Weekly surveillance activities are required with reports or checklists submitted to the CSO. In some cases daily inspections may be required by the CSA (e.g., construction activities capable of a HSCS accident).
- **NOTE:** Hazard Surveillance reports document non-compliant activities by daily inspection (minimum) until corrected as determined by the CSO. Reports include date, time, and members of the inspection team, deficiencies, type of corrective action, and time and date of correction. Hazard surveillance activities must be documented and tracked to completion.
- (8) Acting as members of the Construction Safety Committee or subcommittee and meeting at least monthly.
- (9) Ensuring that documentation of the Team's inspections is provided to the CO or COTR, RE, and the VISN Safety and Health Staff, as requested.
 - m. Facility VHA Chief Engineer. The facility Chief Engineer is responsible for:
- (1) Working with contractor and VHA facility staff to coordinate and monitor an effective construction safety program for projects under their direction.
- (2) Acting as the Safety Officer in accordance with VAAR 836.236-87 and ensuring contractors comply with VA safety and health policies and procedures, and contract requirements.
- (3) Serving on the facility Construction Safety Committee, or subcommittee, to ensure contracts meet the committee's requirements.
- (4) Supporting the CSO, Facility Safety Manager, CO, and engineering staff in implementing the construction safety program.
- n. <u>Contracting Officer (CO) and Contracting Officer's Technical Representative (COTR) or Project Engineer.</u> The CO and COTR or Project Engineer are responsible for:
 - (1) Ensuring that all solicitations and the clause found in VAAR 836.236-87.
- (2) Designating, through a letter of delegation, the COTR, CSO, Chief Engineer, or Safety Program Manager to serve as the Safety Officer for VHA contracts.

- (3) Adding subparagraph (f) of FAR 52.236-13, to the contract language, if the contract involves:
 - (a) Work of a long duration or hazardous nature; or
- (b) Performance of a construction or renovation project on a Government facility that, on the advice of CO, COTR, or CSO involves hazardous materials or operations that might endanger the safety of the general public or Government personnel or property.
- (4) Ensuring that all contracts and associated documents specify that all onsite contracted construction workers have completed the OSHA 10 hour Construction Safety training or the 30 hour Construction Safety training, and other relevant competency training, as determined by the COTR or CSO in coordination with the Multi-disciplinary Team. The determination for other relevant competency training is based on the project hazards and complexity, Federal and state regulations, and VA requirements.
- (5) Ensuring that all projects require contractor verification of the completion of required training.
- (6) Ensuring submittals for contract construction or renovation work to include the names, qualifications, and training dates for the contractor CP designated to administer the site-specific safety program, as well as the CP for other activities as required by OSHA regulation.
- (7) Evaluating and considering past safety records of prospective contractors in awarding contracts. At a minimum, ensuring that all solicitations and contracts require documentation, to be supplied by potential contractors, that specifies the contractor in question has no more than three serious, or one repeat, or one willful OSHA or EPA violation(s) in the past 3 years and has an Experience Modification Rate (EMR) of equal to or less than 1.0.
- (8) Serving on the facility Construction Safety Committee, or subcommittee, to ensure contracts meet the Committee's requirements.
- (9) Ensuring that if contracted construction worker(s) have been determined to be at risk for transmission of TB to them based upon the TB pre-construction risk assessment,
- (a) Then, the contractor must provide written certification that all contract employees assigned to the work site have had a pre-placement tuberculin screening within 90 days <u>prior</u> to assignment to the worksite and been found have negative TB screening reactions. Contractors will be required to show documentation of negative TB screening reactions for any additional workers who are added after the 90-day requirement before they will be allowed to work on the work site.

NOTE: This can be the Center for Disease Control (CDC) and Prevention and two-step skin testing or a Food and Drug Administration (FDA)-approved blood test (see subpars. 5t and 5u).

- (b) Contract employees manifesting positive screening reactions to the tuberculin must be examined according to current CDC guidelines <u>prior</u> to working on VHA property.
- (c) Subsequently, if the employee is found without evidence of active (infectious) pulmonary TB, a statement documenting examination by a physician must be on file with the employer (construction contractor), noting that the employee with a positive tuberculin screening test is without evidence of active (infectious) pulmonary TB.
- (d) If the employee is found with evidence of active (infectious) pulmonary TB, the employee would require treatment with a subsequent statement to the fact on file with the employer before being allowed to return to work on VHA property.
- o. <u>Construction Safety Officer (CSO).</u> CSO responsibilities include project submittal reviews of all construction projects and:
 - (1) Identifies work site risks.
 - (2) Collects deficiency information.
 - (3) Disseminates actions and results.
- (4) Provides oversight of contract construction safety, and is knowledgeable in the general inspection of typical work sites during construction and renovation performed by contract staff, and in the review of contractor safety program submittals.

NOTE: CSO(*s*) *do not take the place of the contractor's CP or act on their behalf.*

- (5) Determines if the contractor is meeting VA standards and contractual requirements for safety and OSHA compliance (Acting as the Safety Officer in accordance VAAR 836.236-87). When these standards and contract requirements are not being met, the VA COTR or CO, in coordination with the CSO must take immediate action to prevent injury, exposure, noncompliance, or property damage.
- (6) Requires the contractor CP to implement and maintain an effective safety program that identifies and controls hazards that may cause injury or illness to VA patients, staff, visitors, and contractor employees; this includes:
- (a) Ensures that the specific safety requirements for construction operations are implemented during facility projects.
- (b) Participates in the VHA facility Multi-disciplinary Team established for the construction safety committee.
- (c) Conducts periodic inspections of VHA construction sites to ensure compliance with safety elements of the established program(s), at a minimum weekly inspections are required.

- **NOTE:** REs are the Safety Officers for OOCFM managed construction sites and any associated inspections. Be aware that the TJC requires protection of all who enter VHA properties, and as such RE construction sites factor into accreditation.
- p. **GEMS Coordinator.** The GEMS Coordinator is responsible for providing guidance on EPA regulations that directly and immediately relate to the impacts that the project may have on the environment during the design or construction stage of the project.
- q. <u>Emergency Planning Coordinator</u>. The Emergency Planning Coordinator is responsible for providing guidance on OSHA regulations as they apply to emergency planning, response, and operations in construction (e.g., 29 CFR 1926.35 and 29 CFR 1926.65).
- r. <u>Construction Lead Person.</u> The construction lead person (VHA Engineering Supervisors, VHA Forepersons, Contractor's Superintendent, Contractor's Forepersons, and other assigned lead persons) is responsible for:
- (1) Administering the site-specific construction safety program as the OSHA defined CP. **NOTE:** Inspections by CPs are required in accordance 29 CFR Part 1926.
 - (2) Acting as the CP for other activities as required by OSHA regulations; including, but not limited to scaffolds, cranes, and excavations.
 - s. **Police and Security Officers.** The police and security officers are responsible for:
 - (1) Ensuring all contractors entering VHA properties comply with the Security Management Program. As a minimum, contractors must notify and obtain permission from the VA Police, be identified by project and employer, and be restricted from unauthorized areas.
 - (2) Providing consultation to the CSO, COTR, or other responsible staff in periodic surveillance of site security and the integrity of barriers to the construction site.
 - t. <u>Intervention Authority and Compliance.</u> CSO, authorized COs (or other personnel responsible through delegation of authority by the CO) with defined actions in this Directive are responsible for intervening whenever conditions, as a result of construction activities, immediately threaten life or health or threaten to damage equipment or buildings. Intervention authority and compliance with this Directive and the associated regulatory requirements are as follows:
 - (1) **Staff.** All staff are responsible for identifying hazardous conditions in need of intervention and for developing a culture of safety. Identified hazardous conditions must be communicated either orally or in a written format to authorized COs (or other personnel responsible through delegation of authority by the CO) who must take prompt corrective measures to include immediate abatement of hazards, stopping of work, hazard awareness training, administrative controls, etc.
 - (2) **Contractors.** Authorized COs (or other personnel responsible through delegation of authority by the CO) must notify the contractor both orally and in written forms of communication requesting

immediate initiation of corrective action of any hazards identified. After receiving the notice the contractor must immediately take corrective action.

- (a) If the Contractor fails or refuses to promptly take corrective action, the CO may issue an order stopping all, or part, of the work until satisfactory corrective action has been taken (FAR 52.236-13).
- (b) Upon a repeat offense of the same or substantially similar hazard, the CO, in coordination with the COTR or CSO, needs to follow the processes for the termination of the contract, if the situation is not resolved using the process outlined in FAR 36.513. The CO exclusively or in collaboration with other personnel responsible through delegation of authority by the CO is responsible for enforcement of the contract.
- (c) The CSO with assistance from the COTR and the Multi-disciplinary Team is responsible for making the Contractor and CO formally aware of any hazard in need of correction.

5. REFERENCES

- a. VHA Emerging Pathogens Guidebook, 1998, Center for Engineering and Occupational Safety and Health available electronically at: http://vaww.ceosh.med.va.gov/01HP/02HP Guidebooks/03 Collections/04HP EmergingPathogen s/PDFContents/Ep.pdf . *NOTE:* This is an internal Web site and is not available to the public.
- b. NFPA Codes and Standards, available at: http://vaww.ceosh.med.va.gov/01FS/pages/NFPAWarning.shtml. NOTE: This is an internal Web site and is not available to the public.
- c. APIC Infection Control Tool Kit Series: Construction and Renovation, available from the Association of Professional Infection Control Practitioners and Epidemiologists.
- d. Guidelines for Design and Construction of Hospital and Health Care Facilities, Facility Guidelines Institute 2010.
- e. Guidelines on Assessment and Remediation of Fungi in Indoor Environments, New York City Dept. of Health, Bureau of Environmental and Occupational Disease Epidemiology, the website is: http://www.nyc.gov/html/doh/html/epi/moldrpt1.html.
- f. Infection Control During Construction. A Guide to Prevention and JCAHO Compliance, Wayne Hansen, Editor, Opus Communications, 2002.
- g. OSHA Regulations for Construction Safety, 29 CFR 1926, available at: http://www.osha.gov/pls/oshaweb/owasrch.search_form?p_doc_type=STANDARDS&p_toc_level=1&p_keyvalue=Construction
- h. U.S. Environmental Protection Agency Regulations, available at: http://www.epa.gov/lawsregs/bizsector/construction.html

- i. Current Standards from The Joint Commission available at: http://vaww.archive.oqp.med.va.gov/oqp_services/accreditation/jcaho.asp. **NOTE:** This is an internal Web site and is not available to the public.
- j. VHA Directive 7701, Occupational Safety and Health. http://vaww1.va.gov/vhapublications/ViewPublication.asp?pub_ID=240. NOTE: This is an internal Web site and is not available to the public.
- k. VHA Handbook 7701.01, Occupational Safety and Health Program Procedures. http://vaww1.va.gov/vhapublications/ViewPublication.asp?pub_ID=2282. **NOTE:** This is an internal Web site and is not available to the public.
- l. VA Directive 7700, Occupational Safety and Health.

 http://vaww1.va.gov/VASAFETY/SignedandDatedfinalSeventySevenHundred.p

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 - m. Construction Safety Council, available at: http://www.buildsafe.org/.
- n. U.S. CDC guidelines, available at: http://www.cdc.gov/niosh/docs/2004-146/ch4/ch4- 2.asp.htm
 - o. Federal Acquisition Regulation, available at: http://www.acquisition.gov/far/
- p. Veterans Affairs Acquisition Regulation, available at: http://www.va.gov/oamm/oa/ars/policyreg/vaar/vaar852.cf m
- q. Veterans Affairs Resident Engineer Handbook available at: http://vaww.cfm.va.gov/RE/. **NOTE:** This is an internal Web site and is not available to the public.
- r. Veterans Affairs Project Manager Handbook available at: http://vaww.cfm.va.gov/RE/ **NOTE:** This is an internal Web site and is not available to the public.
- **6. FOLLOW-UP RESPONSIBILITY:** The Deputy Under Secretary for Health for Operations and Management (10N) is responsible for VHA programs related to this Directive. The point of contact for technical and program issues related to this Directive is the Director, Occupational Safety and Health, Environmental, and Emergency Management (10NA8) at (202) 266-4547.
- **7. RECISSIONS:** VHA Directive 2004-012, dated April 5, 2004, is rescinded. This VHA Directive expires September 30, 2016.

Robert A. Petzel, M.D. Under Secretary for Health

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DISTRIBUTION: CO: E-mailed to VHA Publications Distribution List on 9/27/2011